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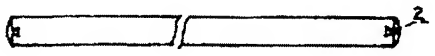
[54]实用新型名称 一种电解种板

[57]摘要

一种电解种板，其特征在于：种板的周边侧面开凹型槽，槽间添满高强度、耐磨、耐蚀、绝缘的材料。本实用新型在不增加种板厚度的基础之上，使种板表面利用率达到 100%，从而极大地减少了母板用料，同时也极大地减少了电解废料的产生，节省了电力。



权 利 要 求 书

1. 一种电解种板，其特征在于：种板的周边侧面开凹型槽(1)。

2. 按权利要求1所述电解种板，其特征在于槽间添满高强度、耐磨、耐蚀、绝缘的材料。

说　明　书

一种电解种板

本实用新型涉及电解技术，特别提供了一种电解种板即母板。

电解铜一般是由种板即母板开始生产始极板，再由始极板进行电解而成，因此电解金属板的质量决定于始极板的质量。为了易于将电解后的始极板从种板剥离，通常在母板边缘制做绝缘边，如中国专利93229998.9，该种方式母板的有效利用率较低，无形中增加了成本，对于钛的电解种板还有一种在周边作矩形槽的边缘处理方式，其同样存在母板有效利用率低的问题，同时由于沟槽处厚度减少，强度势必减弱，为了达到使用要求，钛种板不得不作得较厚，成本的提高是不容忽视的。

本实用新型的目的在于提供一种新型结构的电解种板，其有效利用率高，从而降低金属电解生产的成本。

本实用新型提供了一种电解种板，其特征在于：种板的周边侧面开凹型槽(1)。为提高强度，其间添满高强度、耐磨、耐蚀、绝缘的涂料。本实用新型在不增加种板厚度的基础之上，使种板表面利用率达到100%，从而极大地减少了母板用料，节省了电力。下面结合附图通过实施例详述本实用新型。

附图1为弧状槽种板结构剖示图；

附图2为添涂料的弧状槽种板结构剖示图；

附图3为倒三角形槽种板结构剖意图；

附图4为添涂料的倒三角形剖示图；

附图5为燕尾形槽种板结构剖示图；

附图6为添涂料的燕尾形槽种板结构剖示图。

实施例1

如图1所示为铜电解种板，100×100mm见方，厚4mm，侧面为弧状槽，亦可在槽中添塞市售SEBF熔融结合环氧涂料(2)如图2所示。

实施例2

如图3所示为钛电解种板，100×100mm见方，厚4mm，侧面为倒三角形槽。图4为添涂料(2)后结构。也可以如图5，6所示为燕尾形槽。

说　明　书　附　图

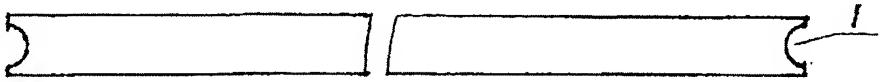


图 1

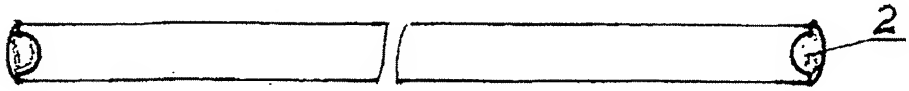


图 2

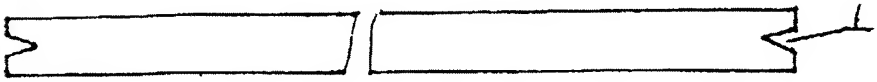


图 3

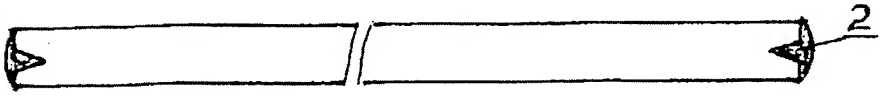


图 4

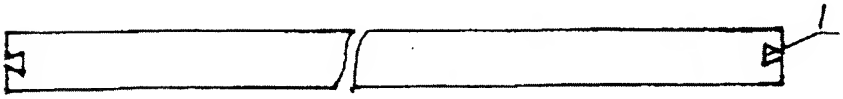


图 5

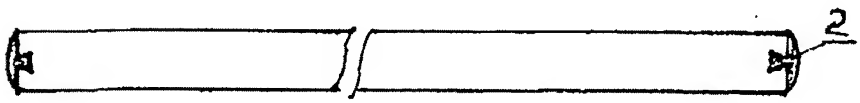


图 6

Electrolytic Blank

The present utility model relates to an electrolytic technique, and in particular, relates to a blank plate in electrolysis, i.e., a mother board.

To electrolyse copper, an starting sheet is firstly formed on a blank plate (i.e., a mother board), and then an electrolytic process is carried out by the starting sheet. Therefore, the weight of a metal plate in electrolysis is dependent on the weight of the starting sheet. Generally, the edges of the blank plate is made to be insulated so that the starting sheet can be striped off from the blank plate easily after the electrolytic process, as described in CN 93229998.9. In this way, the utility efficiency of the mother board is lower, thus increasing the cost. Futher, for a blank plate of titanium, there is a method to process its edges so that it have rectangular channels in its circumferential edges. Similarly, there exists a problem that the utility efficiency of the mother board is lower. At the same time, the thickness of the mother board where the channels are located is reduced, so the strength of the mother board must be weakened. The blank plate of titanium then has to be made thicker in order to reach the requirements of the practical usage, so it is not negligible that the cost is increased.

An object of the present utility model is to provide a blank plate in

electrolysis with a novel structure, whose utility efficiency is improved, therefore decreasing the cost of electrolysis producing a metal.

The present utility model provides a blank plate in electrolysis, characterized in that, a concave groove(1) being formed on a peripheral side of the blank plate. To enhance the strength of the blank plate, the concave groove is filled with a high-strength, wear-resistant, corrosion-resistant and insulating coating. In the present utility model, the surface utility efficiency of the blank plate is up to 100% without increasing its thickness, so that the material used for the blank plate is greatly reduced, thus saving the power.

The present utility model will be described in detail below by describing the embodiments thereof in connection with the attached drawings in which:

Figure 1 is a cross-sectional view of the structure of a blank plate with an arch groove;

Figure 2 is a cross-sectional view of the structure of a blank plate having an arch groove filled with a coating;

Figure 3 is a cross-sectional view of the structure of a blank plate having an inverted triangle-shaped groove;

Figure 4 is a cross-sectional view of the structure of a blank plate having an inverted triangle-shaped groove filled with a coating;

Figure 5 is a cross-sectional view of the structure of a blank plate

having a dovetail -shaped groove;

Figure 6 is a cross-sectional view of the structure of a blank plate having a dovetail -shaped groove filled with a coating.

Embodiment 1

A blank plate of copper (100mm×100 mm, thickness: 4 mm) is shown in Figure 1. The side surface of the blank plate has an arc groove, which can be filled with a commercially available SEBF fusion bonded epoxy coating (2), as shown in Figure 2.

Embodiment 2

A blank plate of titanium (100mm×100 mm, thickness: 4 mm) is shown in Figure 3. The side surface of the blank plate has an inverted triangle-shaped groove. Figure 4 shows the structure of the blank plate after the groove is filled with the coating. The side surface of the blank plate can also has a dovetail-shaped groove, as shown in Figures 5 and 6.

Claims:

1. A blank plate in electrolysis, characterized in that, a concave groove(1) being formed on a peripheral side surface of the blank plate.

2. The blank plate in electrolysis according to claim 1, characterized in that, the concave groove is filled with a high-strength, wear-resistant, corrosion-resistant and insulating material.